

# INSTALLATION AND USER MANUAL



**TIMBER ALUMINIUM PRODUCTS**

**ALUX®**

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**H** **Hvidbjerg** VINDUET  
Maintenance-free Windows and Doors

Updated December 2011

# CONGRATULATIONS WITH YOUR NEW TIMBER/ALUMI- NIUM WINDOWS AND DOORS FROM



YOUR NEW QUALITY PRODUCTS FROM  
HVIDBJERG VINDUET WILL STAY BEAUTI-  
FUL AND FUNCTIONAL FOR MANY YEARS  
REQUIRING ONLY MINIMUM MAINTENANCE.

IN THIS LEAFLET YOU WILL FIND GUIDAN-  
CE TO INSTALLATION, MAINTENANCE AND  
FUNCTION OF YOUR NEW WINDOWS AND  
DOORS.

FOR FURTHER INFORMATION PLEASE VISIT  
OUR WEBSITE

**WWW.HVIDBJERGVINDUET.COM**

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# INSTALLATION GUIDE

It is important for the function and life of the elements that installation is performed correctly. The installation should therefore be carried out by professional fitters of windows and external doors.

NB!

***Complaints or request for service in connection with failure or defects which are the result of inadequate installation or lubrication are not covered by Hvidbjerg Vinduet's warranty. All products are function tested from our factory.***

When unloading and handling the elements use aids and methods which do not damage the elements.

If stored outdoors, the elements must be covered properly.

The elements must never be exposed of weight from surrounding building parts.

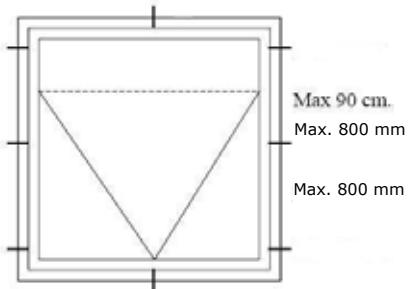
## SECURING

Securing should be permanent and carried out with the best suitable "mechanical means" such as frame bolts/dowels. When securing in composite profile frame head bolts should be used.

Distance between fixing points must not exceed 800mm, and distance to corners must be max. 200mm. This apply both horizontally and vertically.

By element width minor than 1000mm fixing in top and bottom frame is not necessary.

Permanent wedging of appropriate size should always be placed at the outer edges of the bottom frame.



— Fixing

# INSTALLATION GUIDE

## SECURING (CONTINUED)

Wedging must be placed under both wooden and composite profile.

For elements with vertical mullions and closing sashes permanent wedging should always be placed under the bottom frame.

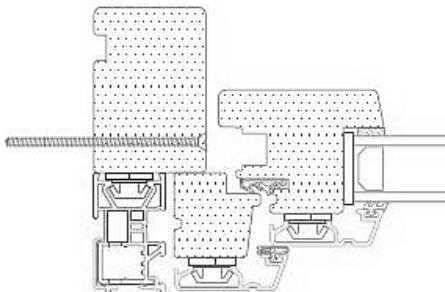
Permanent wedging should always be placed at each fixing point on the hinge side (close to the hinges) and behind the striking plate (in order to prevent burglaries) as well as under the mullion/wing joint underneath the sill for 2-leaf doors.

## Fixed glass

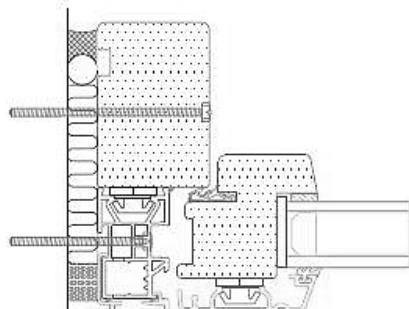
Elements with fixed glass or sash are fixed through the wooden part of the element.

## Tilt/turn

Tilt/turn elements are also fixed through the wooden part of the element.



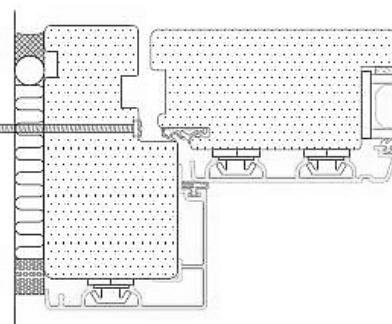
Tilt and turn



Outward opening window

## Top guided, top swing and side hung windows

Fixing with frame bolts in outward opening elements must always be done through the composite profile as close to the hinges as possible.



Inward opening door side and top frame

## Doors

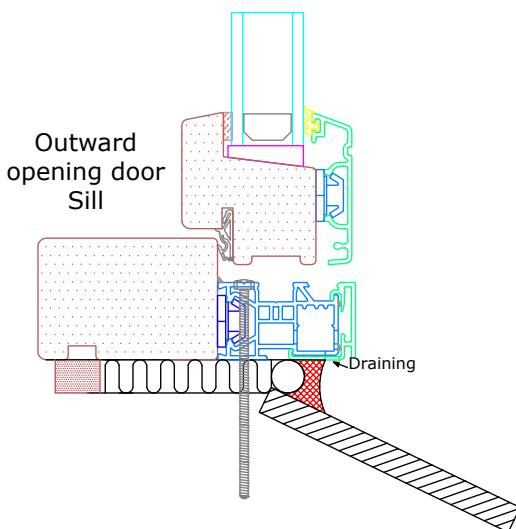
Inward opening doors are fixed through the wooden rebate.

Outward opening doors are fixed according to similar principals as outward opening windows.

# INSTALLATION GUIDE

## SEALING

The outside sealing must be placed on the aluminium part. Underneath the sill the sealing should be placed behind the draining holes.

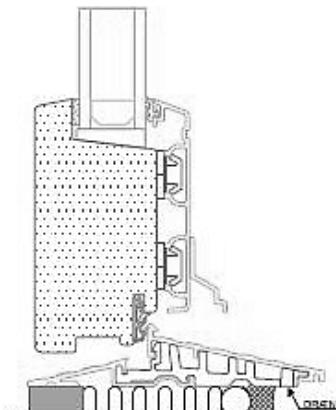


NB!

**The external sealant must neither in whole or partly cover the drainage holes or cracks at the bottom of the sill in order not to prevent draining of the construction.**

The most common types of sealant are:

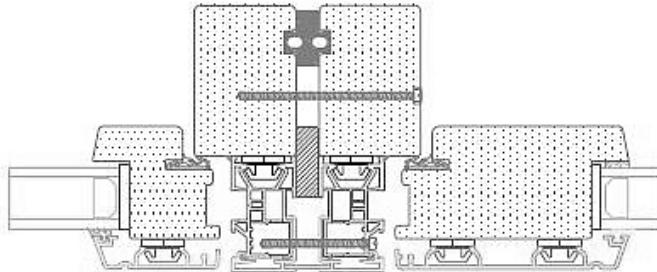
- Plastic or elastic foam
- Asphalt saturated plastic foam (illmod sealing tapes)
- Lime-/cement mortar **must not** be used for windows of timber/aluminium



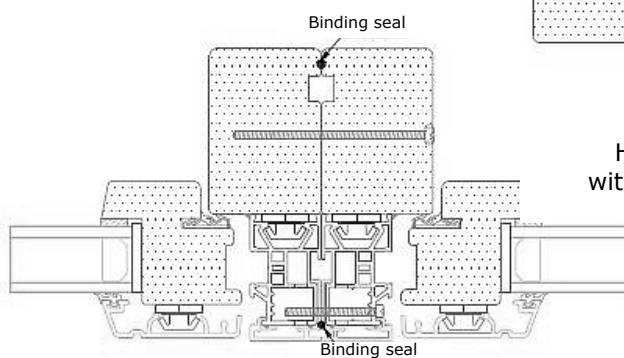
Inward opening door

# INSTALLATION GUIDE

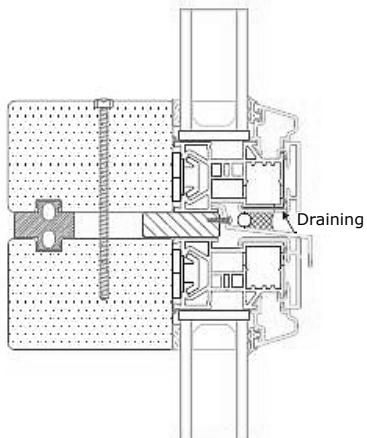
## ASSEMBLING OF ELEMENTS



Vertical assembly with  
strip and rubber coupler



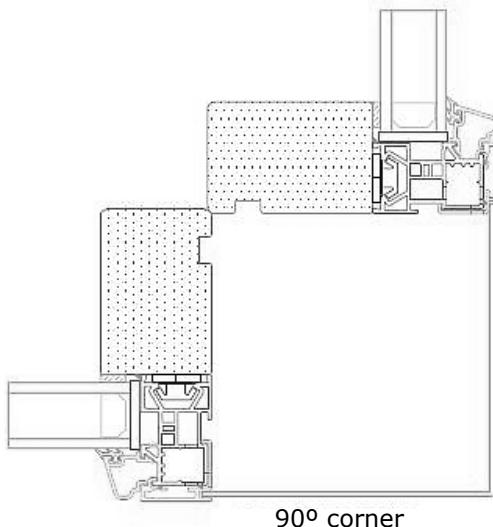
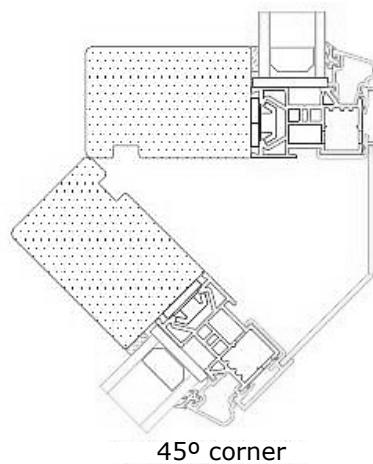
Vertical assembly with  
binding seal



Horizontal assembly  
with drip cap and rubber  
coupler

# INSTALLATION GUIDE

## CORNER SOLUTIONS



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# INSTALLATION GUIDE

## FINISH

After fixing the fitter must

- clean off the drilling dust from the frame rebate
- test functions
- lubricate all moveable parts on hinges and closing/locking iron-mongery
- clean the glass for labels and the like.

Traces of glue, if any, can be removed by using cleanser for glass-ceramical cooking plates.

***The fitter always secures smooth operation through adjustment after fitting.***

NB!

**Hvidbjerg Vinduet A/S cannot be held responsible for faults due to inadequate installation.**

**All products are function tested from our factory.**



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# MAINTENANCE

## GENERAL MAINTENANCE

Your new quality products from Hvidbjerg Vindeut will stay beautiful and operational for many years requiring only a minimum of maintenance.

### Cleaning

The outer aluminium surfaces are regularly washed in lukewarm water with a neutral cleaning fluid (car shampoo) in order to remove dirt from the surface. Use only cleaning and care products which do not damage the surface of the ironmongery.

### Maintenance of the aluminium covering

The outer aluminium covering of our Alux® products are standard chrom-plated and powder-coated aluminium.

The treatment provides a strong and weather resistant surface which requires a minimum of maintenance. Outside sash and frame should be washed twice a year with a soft brush or cloth and lukewarm water with a neutral cleaning fluid (car shampoo). Minor damages of the covering have no influence on the durability of the product, since a natural oxide film quickly forms on exposed aluminium, preventing corrosion and white rust attacks.

Especially in costal areas with salty air and industrial areas with high traffic intensity and air pollution the outer aluminium sash and frame may be effected by the surroundings, and it is essential to clean the surface frequently and at least twice a year.

### Weatherstrips

Weatherstrips do not require any special maintenance, but should be kept clean and free of dirt. This can be done by wiping them once a year with a well-wrung cloth. Furthermore we recommend that the weatherstrips are brushed with a silicone stick to minimize friction during operation.

# MAINTENANCE

## Resin lumps and discoloration from knots

All our wooden profiles are produced from finger jointed timber in order to obtain the best quality. In the process 95 p.c. of all knots and other defects of the timber is removed. This makes the wooden profiles more stable and problems with discoloration from knots and resin lumps are nearly eliminated.

Wood is, however, a living natural material with many advantages - and minor disadvantages



Resin and knots indicate quality of the wood. Resin provides a natural protection of the wood and gives a water-repellent surface. Combined with the factory proofing it ensures a long-lasting product.

Therefore minor variations in structure and gloss and discoloration from resin must be accepted, even with the best surface treatment. Especially on light colour finishes yellow discoloration may occur. They can normally be removed with rubbing alcohol on the spot.

In case the resin penetrates the paint, it can easily be removed with rubbing alcohol. If small lumps of resin form underneath the paint, leave them for 2-3 years or until the resin has penetrated the surface treatment, then remove them with rubbing alcohol, or in more serious cases, scrape and sandpaper them away before applying new paint.

***Resin lumps and discoloration from knots are not regarded as a failure and as such not covered by Hvidbjerg Vinduet's warranty.***

## Double glazing units

Outside condensation may occur on double glazing units with high insulation. The condensation is due to the lower surface temperature of the outside of the glazing unit and has as such no influence on the function of the glass or the general durability.

# MAINTENANCE

## Maintenance and lubrication of ironmongery in general

It is essential to lubricate and maintain all types of ironmongery to ensure easy and smooth operation and function, and to uphold the warranty on the elements.

We recommend that all moveable parts are lubricated at least once a year with acid-free oil. Especially in coastal areas with salty air and in areas with high air pollution the ironmongery must be lubricated and maintained more often in order to ensure smooth operation and to uphold the warranty.

### Top guided, top swing, side swing and side hung

are all hinge systems, and all joints and hinges must be lubricated. The joint should be lubricated on the outside and in the crack between the arms. Use acid-free oil followed by a long-lasting acid-free grease in spray form.

Sliding surfaces, hinge sliders and sliding blocks should be maintained in a clean state to facilitate sliding. It is possible to apply stearin or a dry lubrication product to facilitate sliding. Never use oil on the surfaces.

### Friction brakes on side hung windows and terrace doors

should be kept clean. Friction brakes for side-hung windows and terrace doors are not normally lubricated, but can, if necessary, be treated with a dry lubrication product.

### Tilt and turn ironmongery

All hinges, side bolts and receiver/striking plates should be lubricated with acid-free oil. The bottom hinge should not be lubricated, since it has been filled with grease when fitted. Scissor ironmongery and friction brakes are lubricated in all joints with acid-free oil.

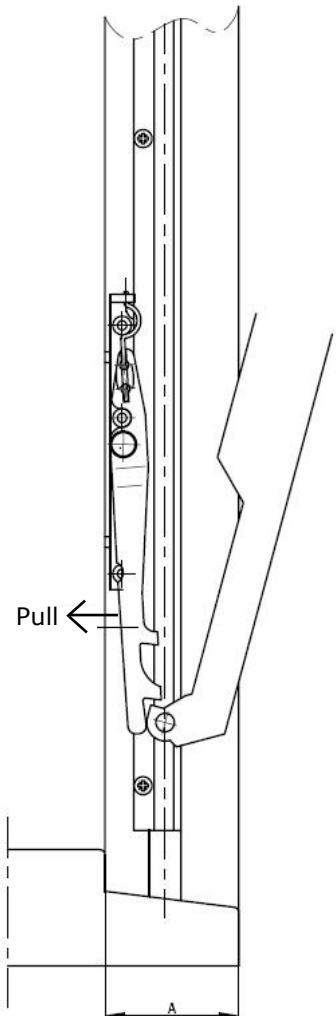
### Espagnolettes and espagnolettes with roller cams

should be lubricated with acid-free oil in the lock case and at rollers, side bolts and on striking plates or receivers.



# FITTINGS

## TOP SWING, CHILD-PROOF LOCK



### DEACTIVATING THE LOCK

1. The sash is opened until the child-proof lock blocks the sash.
2. The sash is closed approx. 2 cm, pull slightly in the lower part of the lock.
3. Push open the sash.
4. Release the arm, and the lock falls into next notch.
5. Repeat (2) while pulling the lock back and the sash can be opened.
6. The sash automatically slides into cleaning lock and is released as described above.



# FITTINGS

## ENTRANCE DOORS

ALUX® entrance doors are furnished with zinkcoated hinges and 3 locking points.

Handle, cylinder etc. are optional.

NB!

**Please note: The locking points must be activated to obtain density.**

### Maintenance and lubrication of ironmongery

All moveable parts must be lubricated at least once a year with acid-free oil in order to ensure easy and smooth operation and function of your doors and to uphold the warranty on the elements.



# FITTINGS

## TILT AND TURN WINDOWS AND DOORS

### USE

Tilt and turn is an inward opening window with both a side- and bottom-hung function.

**The side-hung function** is primarily used in connection with cleaning of the window outside.

The handle is turned in a horizontal position, and the window sash can be opened sideways, i.e. the whole window sash turns into the room.

**The bottom-hung function** is used for the daily ventilation and airing.

By turning the handle 180° into upright vertical position the tilt function is activated providing an opening of approx. 100 mm.

Turning the handle from vertical position 45° upwards gives a ventilation gap at the top sash

### Faulty Use

Note that faulty use / malfunction may occur if

- the ironmongery is uncorrectly adjusted.
- the opening of the window and the intended use of the ironmongery is blocked.
- the window sash is pressed towards the wall groove or further down than the integrated stop allows by opening.
- the window sash or the handle are wrongly stressed or objects are blocking the window groove during opening/closing.



NB!

**Adjustment and replacement if necessary should be carried out only by professionals.**

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Vedligeholdelsesfrie vinduer og døre

# FITTING

## TILT AND TURN WINDOWS AND DOORS (CONTINUED)

### Maintenance and adjustment

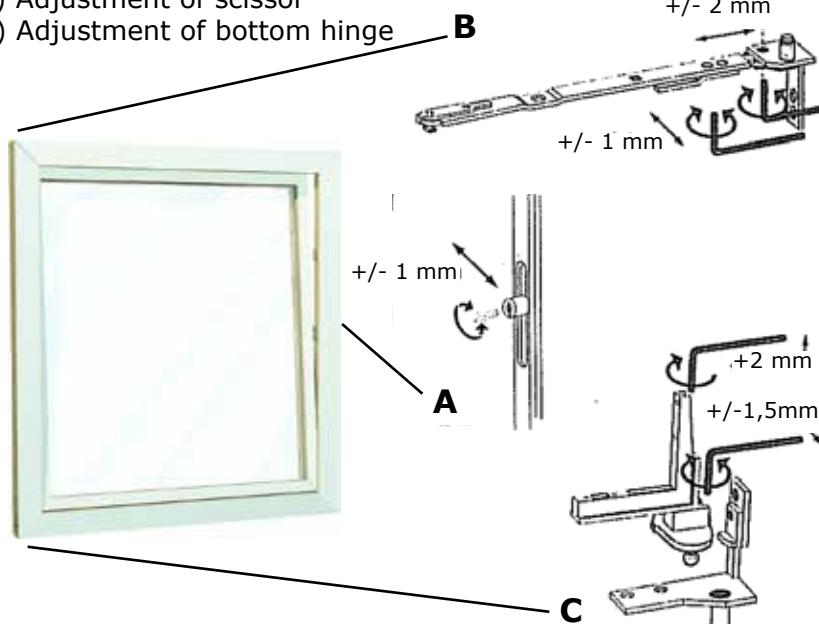
In order to ensure smooth operation please follow the below procedure at least once a year:

- Check scissor ironmongery and bottom hinge for wear and correct function.
- All moveable parts and fixing points are lubricated. Please use acid-free oil.
- The ironmongery must be protected in case of painting/ lacquering.
- Adjustment of the ironmongery is carried out according to drawings:

A) Adjustment of fixing points

B) Adjustment of scissor

C) Adjustment of bottom hinge

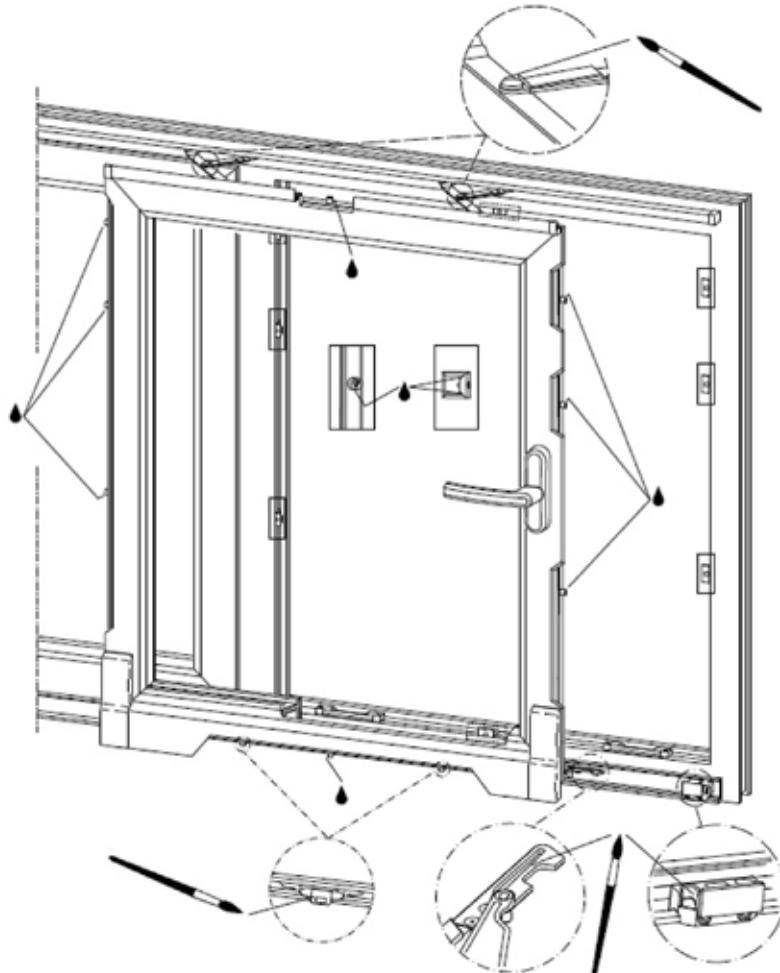


# FITTING

## TILT / SLIDING DOOR

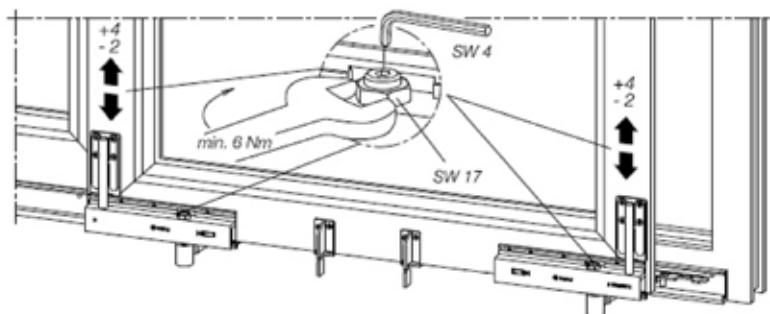
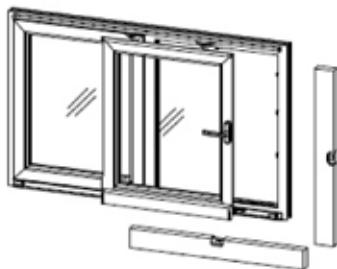
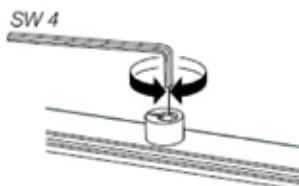
### Maintenance and lubrication of ironmongery

At least once a year all moveable parts are lubricated with acid-free oil in order to ensure smooth operation and to uphold the warranty.



# FITTINGS ADJUSTMENTS

## TILT / SLIDING DOORS



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# USE

## TILT / SLIDING DOORS

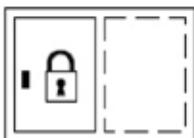


Fig. 1

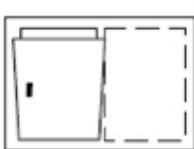
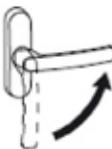


Fig. 2

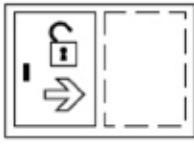
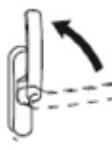
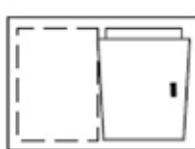


Fig. 3

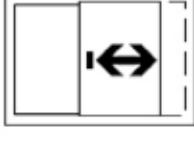
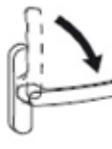
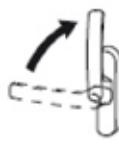
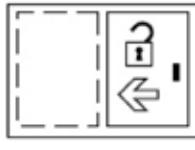


Fig. 4



Fig. 1: Closed position

Fig. 2: The doors is tilted by turing the handle in horizontal position.

Fig. 3: By turning the handle from horizontal to vertical position the door can be slided sideways.

Fig. 4: In order to slide the door back the handle should be moved back to horizontal position. The door can then be closed by turning the handle down (see fig. 1)

# CERTIFICATIONS

## YOUR GUARANTEE FOR QUALITY



**The Association of Danish Window Manufacturers** is the trade organisation of which most of the Danish manufacturers of windows and doors are member. As a member Hvidbjerg Vinduet is covered by the 5-year Warranty Scheme of the Association.

**Read more:** [www.vinduesindustrien.dk](http://www.vinduesindustrien.dk)

### Danish Window Verification (DVV)

DVV-marked windows and outer doors is your guarantee that the manufacturer is subject to systematic control by a fully independent certification body once or twice a year. The certification body - Dansk Vindues Certificering (DVC) controls that the quality procedures and products live up to the requirements stipulated in the Technical Requirements for DVV worked out by experts from The Association of Danish Window Manufacturers and The Danish Technological Institute.

**Read more:** [www.dvc-vinduer.dk](http://www.dvc-vinduer.dk)

### CE-Marking

As from February, 1st 2010 CE-marking of windows and external doors is mandatory. The CE mark proves that the procedures and standards stipulated under the Construction Product Directive are observed by the manufacturer.

CE-marking sets out the requirements for fabricating window and external pedestrian door sets, and includes classifications, acoustics, ventilation, test methods, production control and performance characteristics such as weather tightness, giving guidance for both the systems company and the fabricator in the design, fabrication and installation of windows to approved standards.

# CERTIFICATIONS

## CE MARKING



Østergade 24 • DK-7790 Thyholm • Denmark  
2010



**EN 14351-1:2006+A1:2010**

### **Windows timber/aluminium Type: Alux®**

#### **Used in homes and business buildings**

Resistance to wind load:	npd
Water tightness:	npd
Load bearing capacity of safety devices (top swing window):	Passed
Acoustic performance:	npd
Thermal transmittance coefficient (U-value)	
- single hinged window 1230 x 1480 mm with standard glazing:	1,4*
- single fixed light 1230 x 1480 mm with standard glazing:	1,2*
Radiation characteristics	
-Standard glazing solar factor (g-value):	0,63*
-Standard glazing light transmittance (Lt-value):	0,80*
Air permeability:	npd

npd: no performance determined

\*Regarding the thermal transmittance coefficient (U-value) of actual windows, please contact Hvidbjerg vinduet, acc. to EN 14351-1:2006+A1:2010, Tabel E. 1 note c

### **Entrance doors timber/aluminium Type: Alux®**

#### **Used in homes and business buildings**

Resistance to wind load:	npd
Water tightness:	npd
Height:	npd
Acoustic performance:	npd
Thermal transmittance coefficient (U-value)	
- Frame door 1230 x 2180 mm with standard glazing:	1,6**
- Panelled door 1230 x 2180 mm:	0,9**
Radiation characteristics	
-Standard glazing solar factor (g-value):	0,63**
-Standard glazing light transmittance (Lt-value):	0,80**
Air permeability:	npd

npd: no performance determined

\*Regarding the thermal transmittance coefficient (U-value) of actual entrance doors, please contact Hvidbjerg vinduet, acc. to EN 14351-1:2006+A1:2010, Tabel E. 2 note d

# CERTIFICATIONS

## CE MARKING



**EN 14351-1:2006+A1:2010**

**Windows timber/aluminium Type: Alux® tilt and turn.**

**Used in homes and business buildings**

Resistance to wind load:	npd
Water tightness:	npd
Acoustic performance:	npd
Thermal transmittance coefficient (U-value)	
- single tilt and turn window 1230 x 1480 mm with standard glazing:	1,4*
- single fixed light 1230 x 1480 mm with standard glazing:	1,2*
Radiation characteristics	
-Standard glazing solar factor (g-value):	0,63*
-Standard glazing light transmittance (Lt-value):	0,80*
Air permeability:	npd

npd: no performance determined

\*Regarding the thermal transmittance coefficient (U-value) of actual windows, please contact Hvidbjerg vinduet, acc. to EN 14351-1:2006+A1:2010, Tabel E. 1 note c

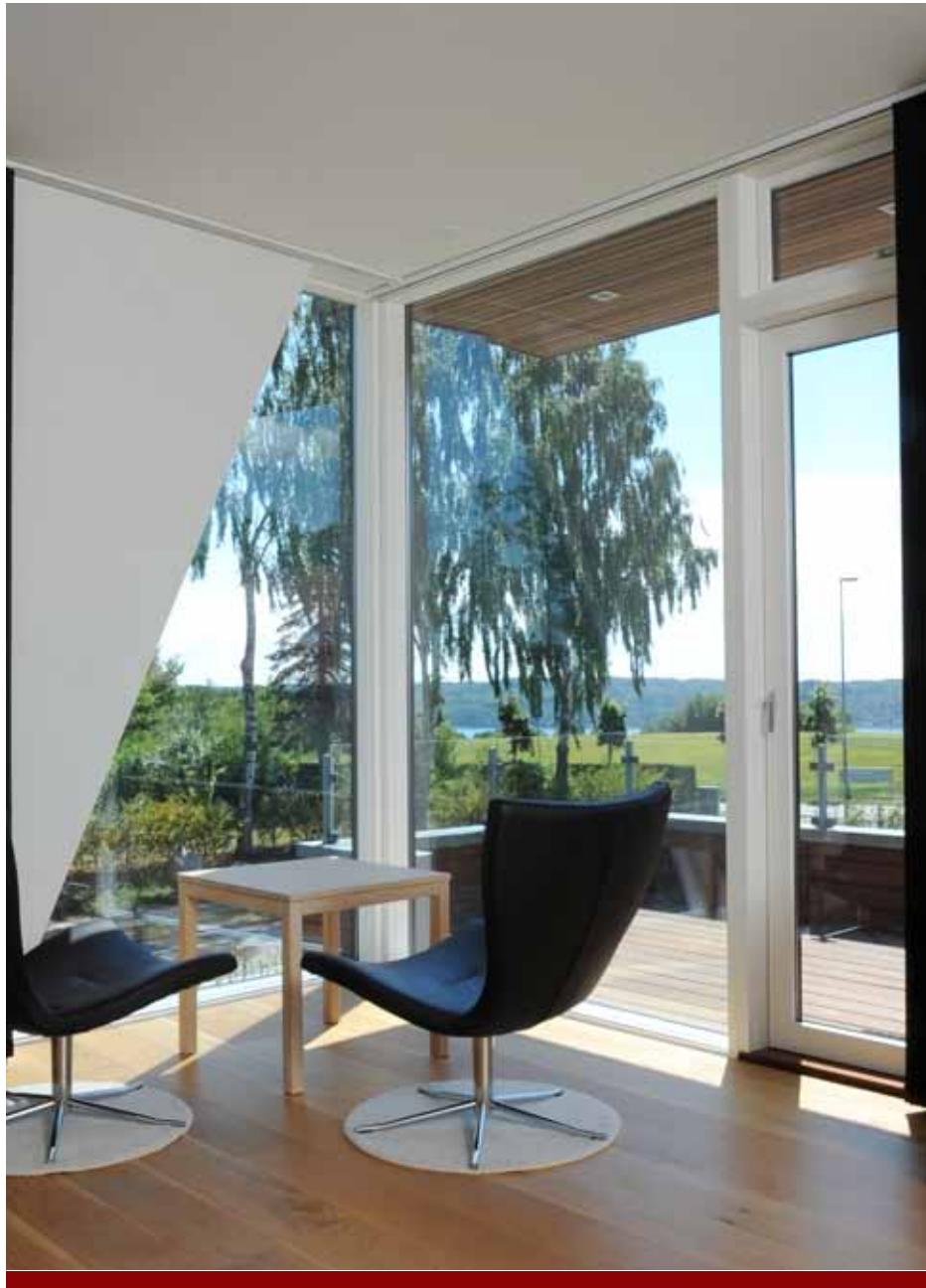
**Entrance doors timber/aluminium Type: Alux® tilt and turn**

**Used in homes and business buildings**

Resistance to wind load:	npd
Water tightness:	npd
Height:	npd
Acoustic performance:	npd
Thermal transmittance coefficient (U-value)	
- Frame door 1230 x 2180 mm with standard glazing:	1,4**
- Sliding door 2500 x 2180 mm with standard glazing:	1,2**
Radiation characteristics	
-Standard glazing solar factor (g-value):	0,63**
-Standard glazing light transmittance (Lt-value):	0,80**
Air permeability:	npd

npd: no performance determined

\*\*Regarding the thermal transmittance coefficient (U-value) of actual entrance doors, please contact Hvidbjerg vinduet, acc. to EN 14351-1:2006+A1:2010, Tabel E. 2 note d.



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**HVIDBJERG VINDUET A/S IS A MEMBER OF VINDUESINDUSTRIEN (*The Association of Danish Window Manufacturers*) AND DVC (*The Danish Window Certification Body*).**

**CONSEQUENTLY ALL OUR ELEMENTS ARE COVERED BY 5 YEARS' WARRANTY, SUBJECT TO CORRECT INSTALLATION AND MAINTENANCE.**

**FOR FURTHER INFORMATION PLEASE VISIT OUR WEBSITE**

**WWW.HVIDBJERGVINDUET.COM**



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